

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A mobile station that can communicate with a first and a second radio communication system [[systems]], the mobile station having reception means for receiving a transmitted signal from at least one base station of said first radio communication system and being characterized by comprising:

~~reception means for receiving a transmitted signal from at least one base station of said first radio communication system;~~

determination means for determining whether or not a location [[point]] at which the signal has been received belongs to a cell that is a service area of the at least one base station of the first radio communication system; and

transmission means for transmitting a result of the determination ~~by the~~ of said determination means to a cell forming process apparatus via the second radio communication system;

whereby said cell forming process apparatus selects a base station for which a cell shape of a corresponding cell of said first radio communication system is to be changed according to said result of determination and instructs the selected base station to change the cell shape thereof.

Claim 2. (Original) The mobile station according to Claim 1, characterized in that said determination means makes said determination on the basis of whether or not synchronization is established with a perch channel of the at least one base station of said first radio communication system.

Claim 3. (Currently Amended) A cell forming process apparatus that can communicate with a mobile station via a first and a second radio communication system characterized by comprising:

reception means for receiving, via a second radio communication system, a result of a [[the]] determination of whether or not a mobile station ~~that can communicate with a first and said second radio communication systems~~ belongs to a cell that is a service area of at least one base station of said first radio communication system, as well as location information of [[on]] said mobile station, and the result and the location information of said base station of said first radio communication system being transmitted by the mobile station;

selection means for selecting a base station for which a cell shape of a corresponding cell of said first radio communication system is to be changed; and

instruction means for instructing the base station selected by the selection means to change the cell shape thereof.

Claim 4. (Original) The cell forming process apparatus according to Claim 3, characterized in that said selection means includes mapping means for mapping cell and non-cell areas relating to the at least one base station of said first radio communication system, on the basis of the result received by said reception means.

Claim 5. (Currently Amended) The cell forming process apparatus according to Claim 3, characterized in that said selection means includes calculation means for calculating a distance between the mobile station and the at least one base station of said first radio communication system on the basis of the location information of ~~[[on]]~~ said mobile station received by said reception means as well as location information of ~~[[on]]~~ the at least one base station; and

means for selecting a base station that is closest to said mobile station, as a target the cell of which is to be changed, on the basis of a result of the calculation by the calculation means.

Claim 6. (Original) The cell forming process apparatus according to Claim 3, characterized in that said selection means selects a base station having the lowest utilization of radio resources, as the target the cell of which is to be changed.

Claim 7. (Currently Amended) The cell forming process apparatus according to Claim 3, characterized by further comprising collection ~~accumulation~~ means for collecting ~~accumulating~~ the result therein which has been received by said reception means so that the result collected ~~accumulated~~ in said collection ~~accumulation~~ means can be supplied to the selection means.

Claim 8. (Currently Amended) The cell forming process apparatus according to Claim 4, characterized in that said selection means includes calculation means for calculating a distance between the mobile station and the at least one base station of said first radio

communication system on the basis of the location information of ~~[[on]]~~ said mobile station received by said reception means as well as location information of ~~[[on]]~~ the at least one base station; and

means for selecting a base station that is closest to said mobile station, as a target the cell of which is to be changed, on the basis of a result of the calculation by the calculation means.

Claim 9. (Original) The cell forming process apparatus according to Claim 4, characterized in that said selection means selects a base station having the lowest utilization of radio resources, as the target the cell of which is to be changed.

Claim 10. (Currently Amended) A cell control method for a cell control system comprising a mobile station that can communicate with a first and a second radio communication system ~~[[systems]]~~ and a cell forming process apparatus for instructing a base station of said first radio communication system to change a cell thereof, the method comprising ~~being characterized in that:~~

receiving, at said mobile station, ~~receives~~ a transmitted signal from at least one base station of said first radio communication system,

determining, at said mobile station, ~~determines~~ whether or not this receiving location ~~[[point]]~~ belongs to a cell that is a service area of at least one base station of said first radio communication system, ~~[[and]]~~

transmitting ~~transmits~~ a result of said determination from said mobile station to said cell forming process apparatus via said second radio communication system, ~~[[and]]~~

selecting, at said cell forming process apparatus, selects a base station for which a cell shape of a corresponding cell of said first radio communication system is to be changed, on the basis of the determination result transmitted by said mobile station, location information retrieved when said mobile station executes the determination process, and location information on the at least one base station of said first radio communication system, and

instructing instructs said selected base station to change the cell shape thereof from said cell forming process apparatus.

Claim 11. (Currently Amended) The cell control method according to Claim 10, characterized in that the location information of [[on]] said mobile station is retrieved, by said second radio communication system.

Claim 12. (Currently Amended) The cell control method according to Claim 10, characterized in that the location information of [[on]] said mobile station can be retrieved by the at least one base station of said first radio communication system.

Claim 13. (Currently Amended) The cell control method according to Claim 10, characterized in that the location information of [[on]] the at least one base station of said first radio communication system is retrieved by said cell forming process apparatus on the basis of an identifier of the base station transmitted by said mobile station together with said determination result.

Claim 14. (Currently Amended) A cell control system comprising a mobile station that can communicate with a first and a second radio communication system ~~[[systems]]~~ and has reception means for receiving a transmitted signal from at least one base station of said first radio communication system, and a cell forming process apparatus that can communicate with said mobile station via a first and a second radio communication system ~~for instructing a base station of said first radio communication system to change a cell thereof,~~ the system being characterized in that:

said mobile station comprises

~~reception means for receiving a transmitted signal from at least one base station of said first radio communication system;~~

determination means for determining whether or not a location ~~[[point]]~~ at which the signal has been received belongs to a cell that is a service area of the at least one base station of the first radio communication system; and

transmission means for transmitting a result of the determination ~~by the~~ of said determination means to a cell forming process apparatus via the second radio communication system, and in that:

said cell forming process apparatus comprises:

reception means for receiving, via a second radio communication system, a result of the determination of whether or not a mobile station ~~that can communicate with a first and said second radio communication systems~~ belongs to a cell that is a service area of at least one base station of said first radio communication system, ~~as well as~~ location information of ~~[[on]]~~ said mobile station, ~~and the result and the~~ location information of said base station of said first radio communication system ~~being transmitted by the mobile station;~~

selection means for selecting a base station for which a cell shape of a corresponding cell of said first radio communication system is to be changed; and

instruction means for instructing the base station selected by the selection means to change the cell shape thereof.

Claims 15-26. (Cancelled).